Additional file 2: List of candidate markers selected by manual curation of published data and text.

	abbr.	protein/ factor	PMID	immuno- modula- tory	tumori genesis
1	ADA	adenosine deaminase	[49]		х
2	ADM	adrenomedullin	[23]		х
3	ANG-1	angiopoietin-1	[50]		х
4	Ast	angiostatin	[62]		х
5	BDNF	brain-derived neurotrophic factor	[62]		Х
6	bFGF	basic fibroblast growth factor	[63]		Х
7	BLBP	brain lipid-binding protein	[51]		Х
8	BMP1	bone morphogenetic protein 1	[52]		Х
9	BMP2	bone morphogenetic protein 2	[62]		Х
10	CCND1	cyclin D1 protein	[62]		х
11	CD9	cluster of differentiation 9	[62]	х	
12	CD40	cluster of differentiation 40	[63]	х	
13	CD40L	cluster of differentiation 40L	[63]	х	
14	CDH 19	cadherin 19, type 2	[63]		х
15	CDH 2	n-cadherin (neural)	[63]		х
16	CDH 3	P-cadherin (placental)	[62]		х
17	CDH11	cadherin 11 (OB-cadherin, Osteoblast)	[62]		х
18	CDH12	cadherin 12 (N-Cadherin, type2)	[62]		х
19	CIII	collagen type III	[63]		х
20	CVIa3	collagen type VIa3	[49]		х
21	CVIIa1	collagen type VIIa1	[49]		х
22	CX3CL1	fractalkine	[63]	х	
23	CXI	collagen type XI	[62]		х
24	EDN1	endothelin	[63]		х
25	EGF	epidermal growth factor	[62]		х
26	EGF R	epidermal growth factor receptor	[50]		х
27	FAS	FAS	[52]		х
28	FAS R	FAS receptor	[62]		х
29	FGF R2	fibroblast growth factor receptor 2	[52]		х
30	FGF R3	fibroblast growth factor receptors 3	[52],[50]		х
31	FGF R4	fibroblast growth factor receptors 4	[52]		х
32	FGF1	fibroblast growth factor acidic	[62]		х
33	FGF2	fibroblast growth factor 2 (basic)	[50]		х
34	FGF4	fibroblast growth factor 4	[52]		х
35	FGF5	fibroblast growth factor 5	[63]		х
36	FGF7	fibroblast growth factor 7	[50]		х
37	FGFR-7	fibroblast-growth-factor receptor 7	[62]		х
38	FN	fibronectin	[62]		х
39	GDNF	glial cell line-derived neurotrophic factor	[53]		х
40	Gli1	glioma-associated oncogene homolog 1	[54]	1	Х

	abbr.	protein/ factor	Source	immuno- modula- tory	tumori genesis
41	GROa	growth-regulated alpha protein	[50]		Х
42	HGF	hepatocyte growth factor	[50]		Х
43	I-309	I-309	[62]	х	
44	IFNg	interferon, gamma	[55]	х	
45	IGF-1R	insulin-like growth factor receptor 1	[52]		Х
46	IGF2	insulin-like growth factor 2	[52]		Х
47	IGF-2R	insulin-like growth factor receptor 2	[52]		х
48	IGFBP-1	insulin-like growth factor-binding protein 1	[56]		х
49	IGFBP-2	insulin-like growth factor-binding protein 2	[62]		Х
50	IGFBP3	insulin-like growth factor binding protein 3	[62]		Х
51	IGFBP-4	insulin-like growth factor-binding protein 4	[57]		Х
52	IGFBP-6	insulin-like growth factor binding protein 6	[49]		Х
53	IGF-I	insulin-like growth factor 1	[52]		Х
54	IL-10	interleukin 10	[62]	х	
55	IL-12 p70	interleukin 12p70	[62]	х	
56	IL-12p40	interleukin 12p40	[62]	х	
57	IL-1b	interleukin 1b	[52]	х	
58	IL-3	interleukin 3	[52]	х	
59	IL-3R	interleukin 3 receptor	[52]	х	
60	IL-4	interleukin 4	[29]	х	
61	IL-6	interleukin 6	[58]	х	
62	IL-8	interleukin 8	[50]	х	
63	IP-10	interferon gamma-induced protein 10	[62]	х	
64	ITG alpha V	integrin alpha V (CD51)	[52],[50]	х	
65	ITGB 1	integrin β1 (CD29)	[52]		Х
66	KRT18	cytokeratin 18	[49]		Х
67	LIF	leukemia inhibitory factor	[62]		Х
68	MCP-1	monocyte chemotactic protein-1	[62]	х	
69	MIA	melanoma inhibitory activity	[21]		Х
70	MIF	macrophage migration inhibitory factor	[62]	х	
71	MIG	monokine induced by IFNy	[62]	х	
72	MK	midkine ,	[20]		х
73	ММР9	matrix metalloproteinase-9	[54]		х
74	MMP13	matrix metalloproteinase-13	[59]		х
75	MPIF-1	myeloid progenitor inhibitory factor-1	[62]	Х	
76	NAP-2	neutrophil-activating protein-2	[62]	Х	
77	NCAM (CD56)	neural cell adhesion molecule	[62]	х	
78	NRP1	neuropilin-1	[50]		х
79	NGF R	nerve growth factor receptor	[62]		X
80	OPG	osteoprotegerin	[63]	х	

	abbr.	protein/ factor	Source	immuno- modula- tory	tumori genesis
81	OPN	osteopontin	[50]		х
82	PARC (MIP- 2)	pulmonary and activation-regulated chemokine	[63]	х	
83	PDGF-AB	platelet-derived growth factor AB	[52],[50]		х
84	PDGF-BB	platelet-derived growth factor BB	[63]		x
85	PDGFRa	platelet-derived growth factor receptor a	[50]		х
86	PIGF	placenta growth factor	[50]		x
87	RANTES	regulated upon activation, normal T-cell expressed, and secreted	[62]	x	
88	SCF	stem cell factor	[20]		
89	SDF-1	stromal cell-derived factor-1	[62]		х
90	sgp130	soluble glucoprotein 130	[63]	x	
91	ShhN	sonic hedgehog	[54]		x
92	SIVA-1	CD27-binding (Siva) protein	[62]	х	
93	SPARC	secreted protein acidic and rich in cysteine	[50], [52]		х
94	survivin	survivin	[49]		х
95	TGFß1	transforming growth factor beta 1	[52]	х	
96	TGFα	transforming growth factor α	[63]	х	
97	Tie-1	tyrosine kinase with immunoglobulin-like and EGF-like domains 1	[62]	х	
98	Tie-2	tyrosine kinase with immunoglobulin-like and EGF-like domains 2	[62]	х	
99	TIMP-1	tissue inhibitor of matrix metalloproteinase 1	[50]		х
100	TIMP-2	tissue inhibitor of matrix metalloproteinase 2	[50]		х
101	TNC	tenascin C	[49],[60]		х
102	TNF-a	tumor necrosis factor α	[50],[52]	х	
103	TNF-R1	tumor necrosis factor α receptor	[52]	х	
104	TNXB	tenascin XB	[60]		х
105	TRAIL R2	TNF-related apoptosis-inducing ligand receptor 2	[54]		х
106	TRAIL R3	TNF-related apoptosis-inducing ligand receptor 3	[63]		х
107	TRAIL R4	TNF-related apoptosis-inducing ligand receptor 4	[63]		х
108	TSP-1	thrombospondin 1	[63]		х
109	TYMS	thymidylate synthase	[63]		х
110	u PAR	urokinase receptor	[50]		х

	abbr.	protein/ factor	Source	immuno- modula- tory	tumori genesis
111	uPA	urokinase	[46]		х
112	VCAM-1	vascular cell adhesion protein 1	[61]	х	
113	VEGF	vascular endothelial growth factor	[44]		х
114	VEGFR3	vascular endothelial growth factor receptor 3	[52]		х
115	wwox	WW containing oxidoreductase	[59]		х